

IN THE CLAIMS

Please cancel claim 33 without prejudice to Applicants' right to pursue the subject matter of this claim in a future application. Please amend claims 31, 36-39 and 44-47 as follows:

31. (CURRENTLY AMENDED) A ~~synthetic soluble peptide made by solid phase synthesis~~ comprising ~~all or a fragment or variant of~~ a regulatory virus protein R (Vpr) of the human immunodeficiency virus type 1(HIV-1) (SEQ ID NO: 1), ~~or a fragment or variant thereof~~, wherein the fragment or variant thereof consists of a peptide selected from the group consisting of:

- (a) a 20 amino acid Vpr protein (rVpr^{1-20} or rVpr^{21-40} ; SEQ ID NO: 8 and 9, respectively);
- (b) a 47 amino acid N-terminal peptide (rVpr^{1-47} ; SEQ ID NO: 2);
- (c) a 49 amino acid long C-terminal peptide (rVpr^{48-96} ; SEQ ID NO: 3); ~~or~~
- (d) ~~a fragment of at least 15 amino acids of any one of (a)-(c)~~
 rVpr^{11-25} (SEQ ID NO: 4); or
- (e) ~~rVpr^{46-60} (SEQ ID NO: 6).~~

32. (PREVIOUSLY PRESENTED) The synthetic peptide of claim 31, consisting of rVpr^{1-96} (SEQ ID NO: 1).

33. (CANCELLED)

34. (PREVIOUSLY PRESENTED) The synthetic peptide of claim 31 bound to a second molecule, wherein the second molecule comprises a DNA or protein molecule.

35. (PREVIOUSLY PRESENTED) The synthetic peptide of claim 32 bound to a second molecule, wherein the second molecule comprises a DNA or protein molecule.

36. (CURRENTLY AMENDED) A pharmaceutical composition comprising the synthetic peptide of claim 31 and a ~~pharmaceutically acceptable~~ carrier.

37. (CURRENTLY AMENDED) A pharmaceutical composition comprising the synthetic peptide of claim 32 and a ~~pharmaceutically acceptable~~ carrier.

38. (CURRENTLY AMENDED) A pharmaceutical composition comprising the synthetic peptide of claim 34 and a ~~pharmaceutically acceptable~~ carrier.

39. (CURRENTLY AMENDED) A pharmaceutical composition comprising the synthetic peptide of claim 35 and a ~~pharmaceutically acceptable~~ carrier.

40. (WITHDRAWN) A method of producing synthetic peptides derived from the regulatory virus protein R (Vpr) of HIV-1, the method comprising:

- (a) synthesizing C-terminal Vpr peptides on a serine resin; and
- (b) synthesizing N-terminal Vpr peptides on a polystyrene polyoxyethylene resin;

wherein chain elongation of the peptides is performed using fluoromethyloxycarbonyl (Fmoc) protection.

41. (WITHDRAWN) The method of claim 40, further comprising:

- (c) cleaving protection groups using a cleavage mixture comprising 95% trifluoroacetic acid (TFA), 3% triisopropylsilane and 2-5% ethanedithiol.

42. (WITHDRAWN) The method of claim 40, further comprising purifying the peptides by HPLC on a column of silica gel using a linear gradient of TFA and water in acetonitrile.

43. (WITHDRAWN) A synthetic Vpr peptide produced by the method of claim 40.

44. (CURRENTLY AMENDED) A biological assay ~~system~~ product comprising a synthetic peptide of claim 31 immobilized on a substrate.

45. (CURRENTLY AMENDED) A biological assay ~~system~~ product comprising a peptide of claim 32 immobilized on a substrate.

46. (CURRENTLY AMENDED) The biological assay ~~system~~ product of claim 44, ~~which comprises an ELISA wherein the substrate comprises an ELISA carrier surface.~~

47. (CURRENTLY AMENDED) The biological assay ~~system~~ product of claim 45, ~~which comprises an ELISA wherein the substrate comprises an ELISA carrier surface.~~